(b) whether Government have a plan to carry such tests at regular intervals and if so what is the plan; and

(c) what steps will be taken to explain India's stand to those countries who are signatories to the Comprehensive Tests Ban Treaty (CTBT)?

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS (SHRIMATI VASUNDHRA RAJE): (a) It is not in the national interest to disclose the information sought for.

(b) Government have announced a moratorium on further nuclear tests and offered to formalise it into an obligation through negotiations with key world powers.

(c) Government are taking the necessary steps in this direction.

Use of Indigenous Technology in Nuclear Tests

173. DR. ALLADI P. RAJKUMAR: Will the PRIME MINISTER be pleased to state:

(a) the extent and range of indigenous technology used in the recent three underground nuclear tests at Pokhran;

(b) the extent to which these tests will help research in nuclear technology for peaceful purposes; and

(c) what is India's stand on the CTBT and NPT in the new situation?

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS (SHRIMATI VASUNDHRA RAJE): (a) Research in the field of nuclear science and technology with particular reference to the nuclear power sector covers a very wide range of areas and is multi-disciplinary in nature. It covers chemical engineering, mechanical engineering, nuclear physics and chemistry, robotics, high precision measurements and production technology, electronics and information technology, etc. In particular, the scientists and engineers of the Department of Atomic Energy (DAE) have been able to achieve complete mastery over the entire nuclear fuel cycle starting from mining of uranium ore to production of uranium fuel of various kinds and the disposal of the waste, including reprocessing. The establishments of the Department of Atomic Energy have been involved in these areas of research ever since their inception. This entire range of mostly indigenously developed technology contributed to the success of the nuclear tests carried out recently at Pokhran.

(b) In principles, underground nuclear explosion can be used for peaceful applications like in-situ leaching of fractured coper ores, digging canals, etc. However, at present, neither India nor any other country is contemplating such applications.

(c) Government have stated that India would be prepared to consider being an adherent to some of the undertakings in the CTBT. However, it has also been stated that these decisions cannot be taken in a vacuum and will depend upon reciprocal responses. Government's position on the discriminatory NPT treaty is well-known.

Reasons for conducting Nuclear Explosion at Pokhran

174. DR. SHRIKANT RAMCHANDRA JICHKAR: Will the PRIME MINISTER be pleased to state:

(a) the details of the three atomic/nuclear explosions made in Pokhran on 11th May, 1998;

(b) the reasons behind making these tests at this time; and

(c) the achievement of these tests?

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS (SHRIMATI VASUNDHRA RAJE): (a) Three Nuclear Tests were conducted on May 11, 1998. The tests on May 11 were a Thermonuclear Device with a yield of about 45 kT, a Fission Device with a yield of about 15 kT and a low yield device with a yield of about 0.2 kT. All the tests were fully contrained with no release of radioactivity into the atmosphere. The measured yields are in line with expected values.